

INSPECTION REPORT

for

RCRA Subtitle C

at

ALBEMARLE CORPORATION

2858 Black Vail Road

Tyrone, PA 16686-8100

PAD030069140

Large Quantity Generator

Inspection Date

August 14, 2014

Kenneth J. Cox
Waste and Chemicals Management Division
September 3, 2014

Albemarle Corporation
Tyrone, PA 16686
August 14, 2014

PAD030069140

Inspectors:

Kenneth J. Cox - USEPA (215-814-3441)
Marty A. Stern - PADEP (814-946-7334)

Facility Representative:

Randy Andrews – Plant Manager (814-684-7219)
Jennifer L. Fordick – Site Compliance Manager (814-684-7228)
Joseph E. Stanek – Environmental Engineer (814-684-7240)

Background

Albemarle Corporation's (Albemarle or the Facility) Tyrone, PA facility is a Large Quantity Generator of hazardous waste. The facility was selected for inspection by EPA's RCRA Land Enforcement office and put on the FY08 inspection plan. The inspection was unannounced and was coordinated with the Pennsylvania Department of Environmental Protection (PADEP). The purpose of the inspection was to evaluate the facility's compliance with the Resource Conservation and Recovery Act (RCRA).

Opening Conference

The inspectors entered the facility shortly after 9:00 AM. We signed in at the guard house, watched a training video, and were issued required safety equipment prior to meeting Mr. Stanek and proceeding to a conference room where we met Mr. Andrews and Ms. Fordick. Credentials were shown and the purpose of the inspection was discussed.

Albemarle is a custom chemical manufacturer of a wide range of intermediaries, catalyst, pesticides, herbicides, etc. They operate over 30 reactors as large as 4,000 gallons for large customer orders and as small as 30 gallons for pilot production.

The total property area is 120 acres, but only 19 acres are developed for the 23 building manufacturing site. There are 172 employees that work that work three shifts, 365 day a year.

Waste Generation

Albemarle's process flexibility generates a wide variety of waste and in large volumes. The waste codes listed in their 57 page Biennial Report are: D001, D002, D003, D007, D009, D035, D038, D040, F002, F003, F005, U147, and U169 (Attachment A). The largest wastes stream is a D001/F003 waste (363,237 lbs. in 2013) shipped in tanker trucks. The majority of the wastes are liquid which are primarily managed in a 10 tank cluster adjacent to the production area (Photo #6). Waste water, including uncontaminated rain water, is treated in a jacketed neutralization tank and the passed through two resin packed columns prior to discharge (Photo #7) to the local POTW. No wastes are managed or stored inside the active production area. Because of the toxicity of some of the process chemical, Albemarle is very safety conscious in all phases of the facility operation. Due to the type and nature of the manufacturing, the process area was not inspected.

Observations

During a tour of the facility led by Mr. Stanek and Ms. Fordick the following observations were made:

The inspectors' first stop was the laboratory building. Outside the building were two drum containment units (Photo #3). A single drum unit (Photo #1) contained a satellite accumulation unit for mercury waste generated inside the lab. The second unit contained a 90 day accumulation drum for waste generated inside. The drum was marked hazardous waste and dated 7/11/14. There was only one drum in the 2 drum unit. Inside the lab were several areas where small containers were being properly managed under satellite rules (Photos #4 & #5).

The facility's ten 8,000 gallon waste tanks (Photo #6) are located in one corner of the production area. One of the tanks is designated for TSCA waste and another one is for waste water. Equipment subject to air emissions regulations were tagged (Photos #12 & #13) except for a small diaphragm pump and valves designated for loading hazardous waste into outgoing tank trucks. Subsequent to the inspection, Mr. Stanek sent an e-mail updating the status of the unmarked equipment (Attachment B).

Walking toward the 90 day drum storage pad, the inspector observed several large bins which are collection points for operators' PPE (Photo #8). They were all close, labeled as hazardous was and dated.

At the container storage pad (Photo #10), the inspectors observed both hazardous and non-hazardous waste in drums, plastic bins and metal totes. Two of the drums were designated for aerosol can accumulation (Photo #11). All of the drums containing hazardous waste were closed, labeled, and dated. The drums of hazardous waste were in a corner with non-hazardous waste drums in front of them. The facility representatives had the non-hazardous waste drum moved so all of the labels were visible for inspection. All were in good condition and properly marked.

The final area inspected was the maintenance shop where universal wastes are stored. At the open doorway to the shop were two drums, one for universal waste broken bulbs and the other a satellite container for aerosol cans (Photo #15). Both were properly marked. Intact bulbs are stored in designated horizontal wooden boxes which have a latched door (Photo #16 & 17). Closed cardboard boxes are inserted into the corresponding sized wooden box.

Records Review

After the plant tour the inspectors went back to the conference room to review files. The following observations were made:

CONTINGENCY PLAN – The Contingency Plan is a 214 page document that was last updated on 12/6/13. The document appeared to be complete and meet the regulatory requirements. The Chain of Command (emergency coordinators) identifies the people who are in charge during emergency events (Attachment D).

TRAINING – The Training Plan (Attachment E) is documented in the Contingency Plan. Albemarle's focus on safety dictates an extensive training program which requires annual refreshers. Staff training records for 2014 are in Attachment F.

INSPECTIONS – The facility keeps detailed records of inspections of the drum storage area. Tanks are inspected once each shift by the supervisor and daily by the EHS staff (Attachment G). No discrepancies were observed.

MANIFESTS - A review of the 2014 manifests and LDR forms was made. The number of manifests for this period was as many as most companies have for five years. Manifests for a two day period in March of 2014 are attached to show the volume of waste shipped on a routine basis (Attachment H). All manifests reviewed were complete.

TANK CERTIFICATION – Certifications for the 8,000 gallon hazardous waste tanks were reviewed and found complete (Attachment I).

AIR EMISSIONS MONITORING – Albemarle brings a contractor onsite to monitor air emissions monthly. This is a plant wide effort that covers both LDAR under the Clean Air Act and Subparts BB and CC under RCRA. Except for the pump and associated equipment mentioned above, the air emissions monitoring program records appeared complete (Attachment J).

Exit Conference

A brief exit conference was held with the three facility representatives. The following areas of concern discussed were:

1. The satellite drum for mercury wastes located outside the lab does not meet the requirements for “at or near the point of generation and under the control of the operator”.
2. Drums of hazardous waste need to be stored so the labels are visible and the condition of the drums can be assessed during inspection.
3. The pump used to load truck with waste needs to be part of the air emission program.
4. Recommend emergency coordinator duties be included in their job descriptions.



Photo #1 – Satellite container outside laboratory building collecting mercury waste from lab equipment.

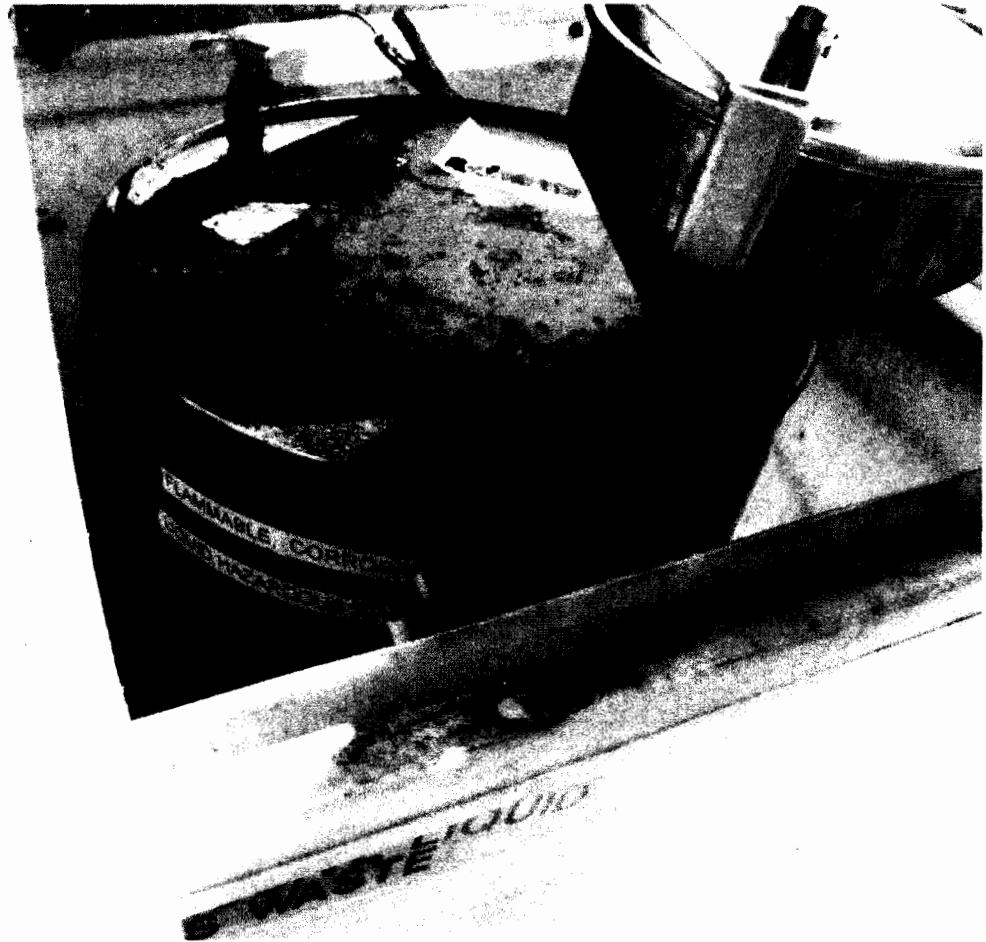


Photo #2 – 90 day accumulation drum storing lab waste.



Photo #3 – Containment units for hazardous waste outside the laboratory building. Satellite for mercury waste (Photo #1) on the left and the 90 day accumulation (Photo #2) on the right.

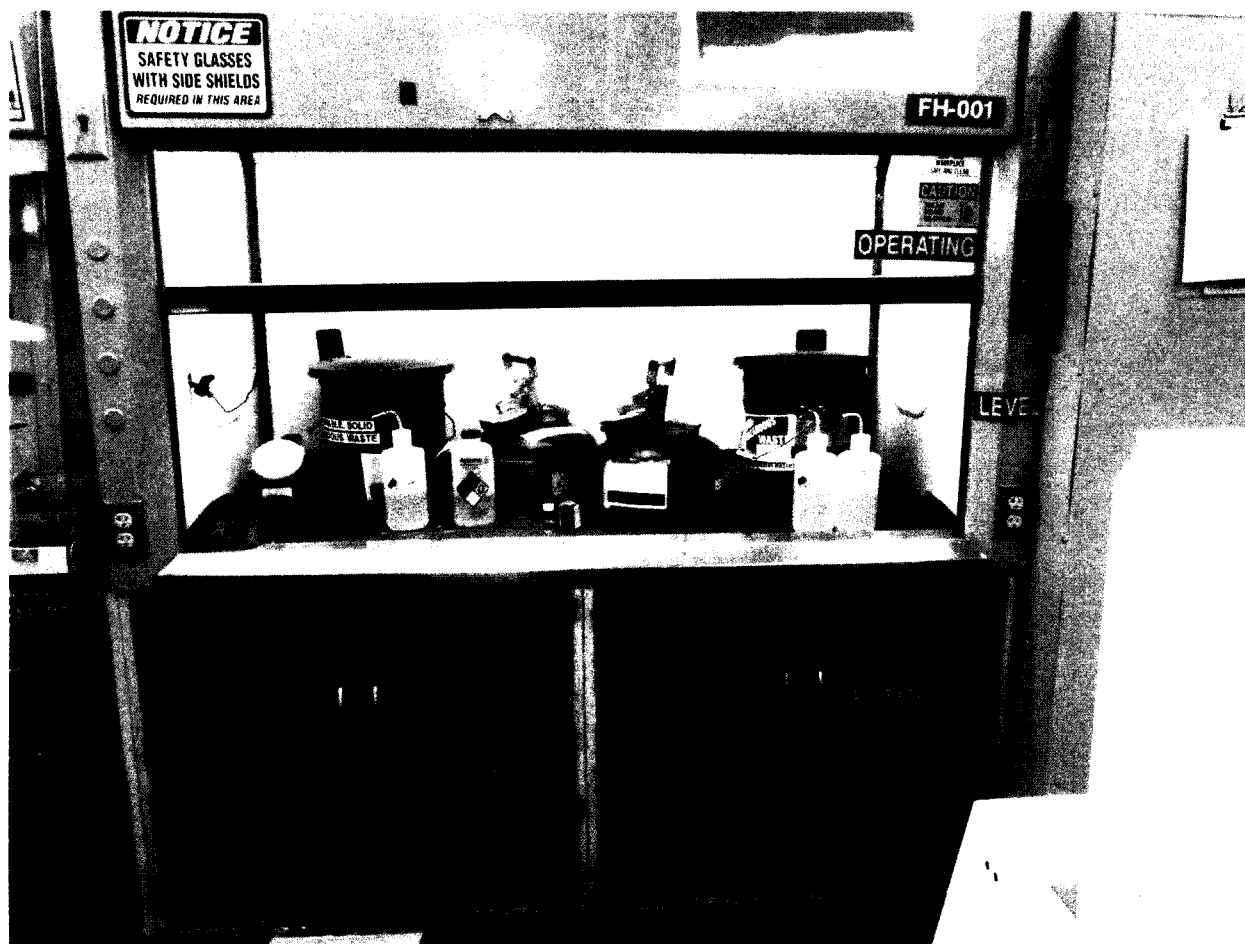


Photo #4 – Lab waste accumulation area inside the lab.

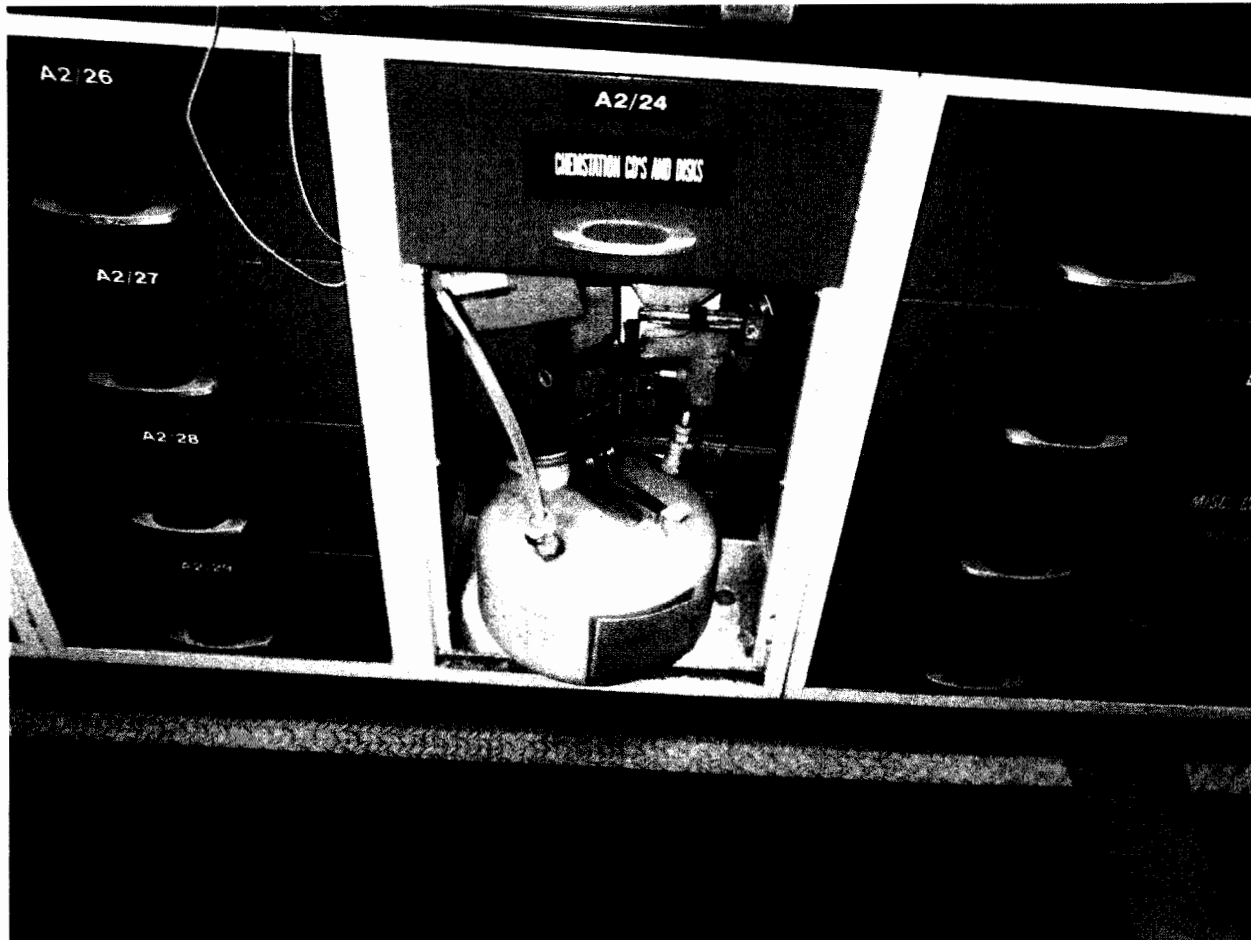


Photo #5 – Analytical equipment draining to satellite container in the lab.

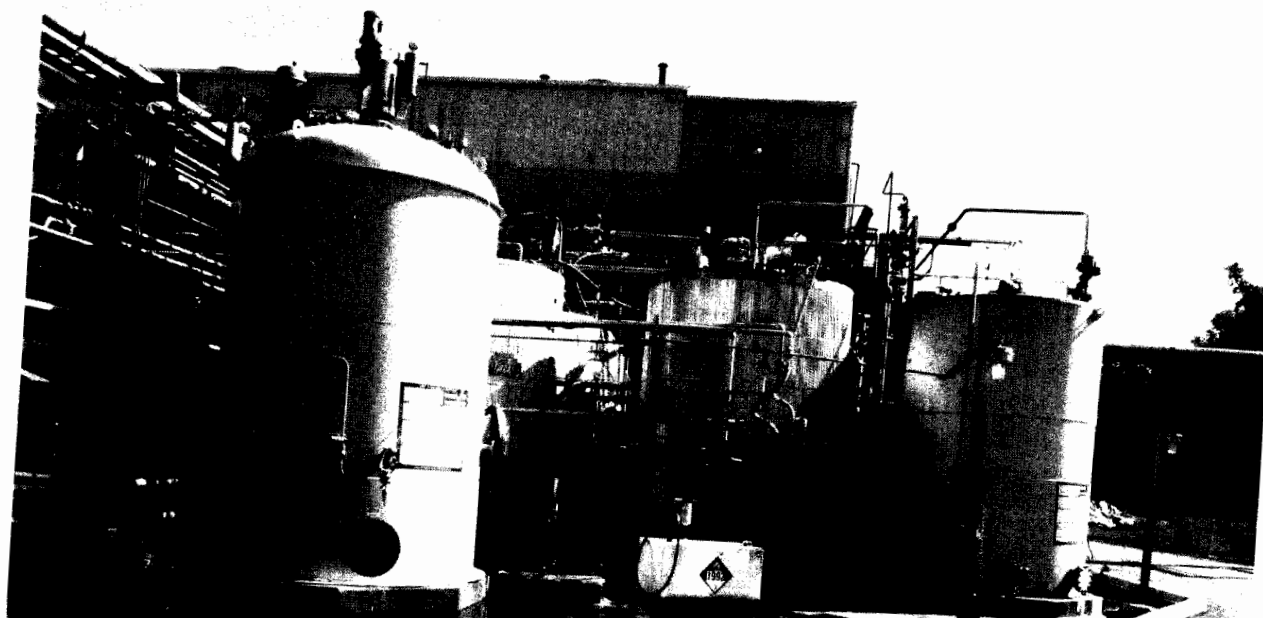


Photo #6 – Waste tank storage area contains 10 tanks for hazardous waste, TSCA waste, and waste water prior to treatment.

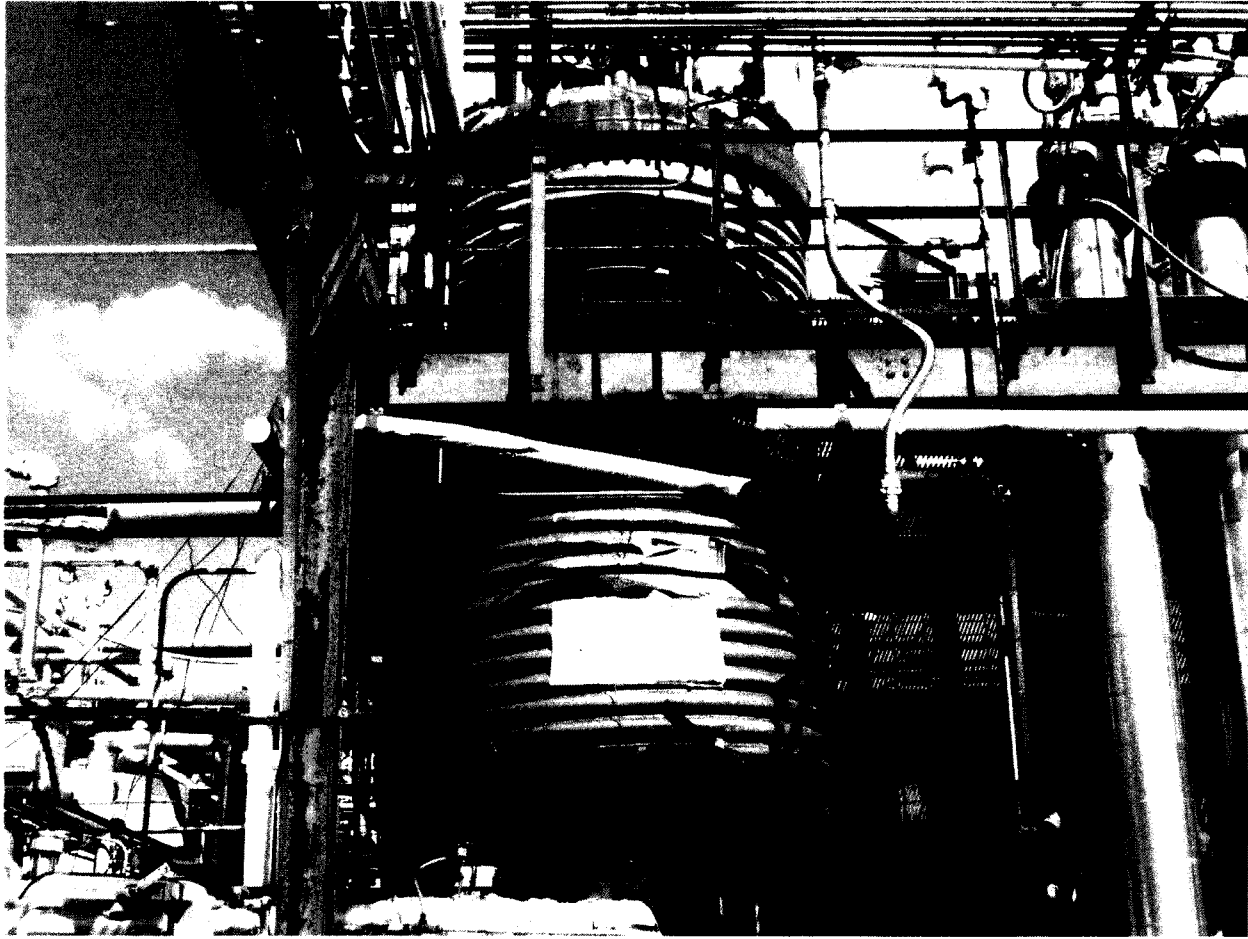


Photo #7 – Waste water treatment system.

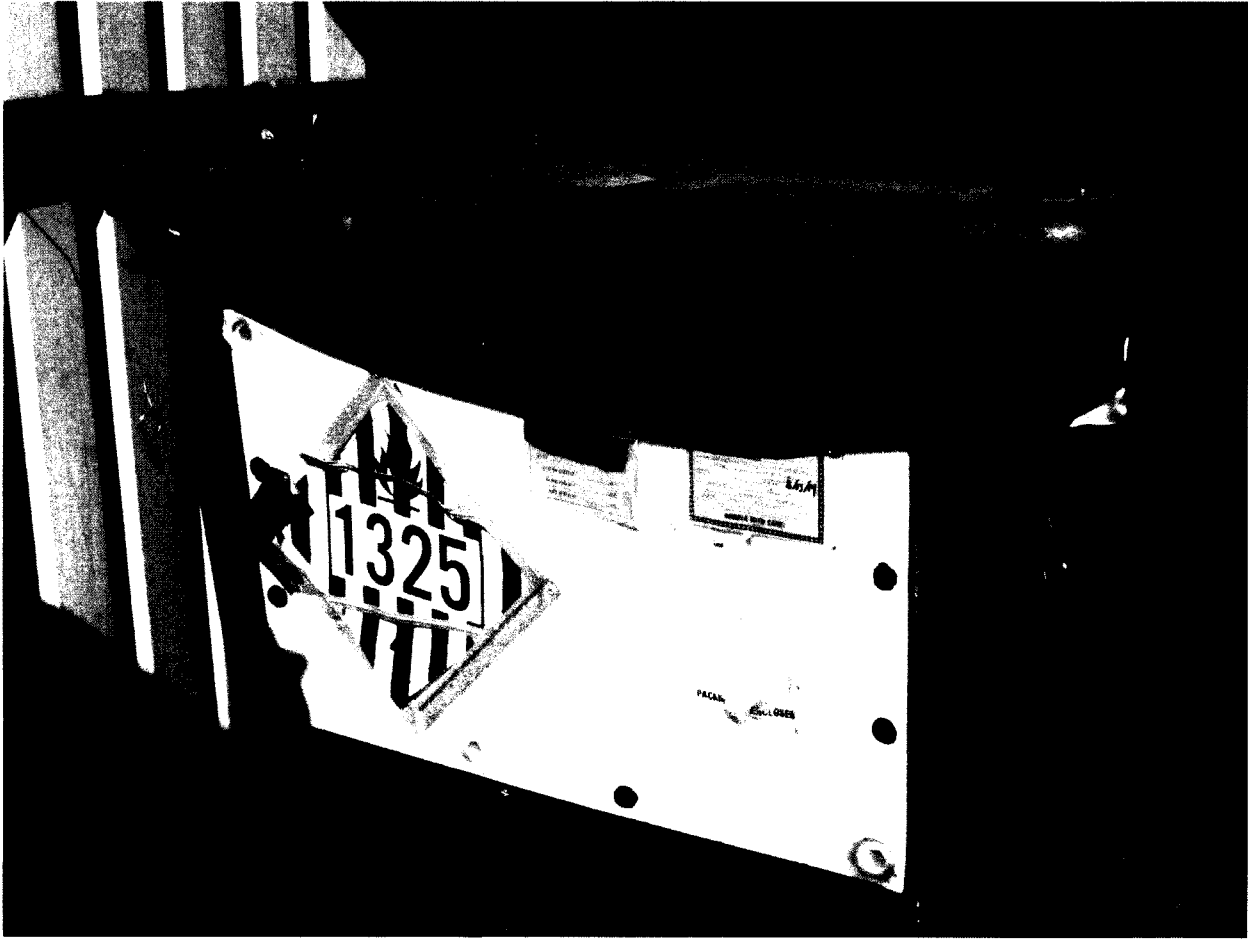


Photo #8 – Collection box for contaminated PPE just outside the production area.



Photo #9 – Waste water holding tank prior to discharge to sewer.



Photo #10 – Drum and tote storage area. Contains both hazardous and non-hazardous waste.



Photo #11 - One of two dedicated drums for aerosol cans. Labeled and dated 7/7/14

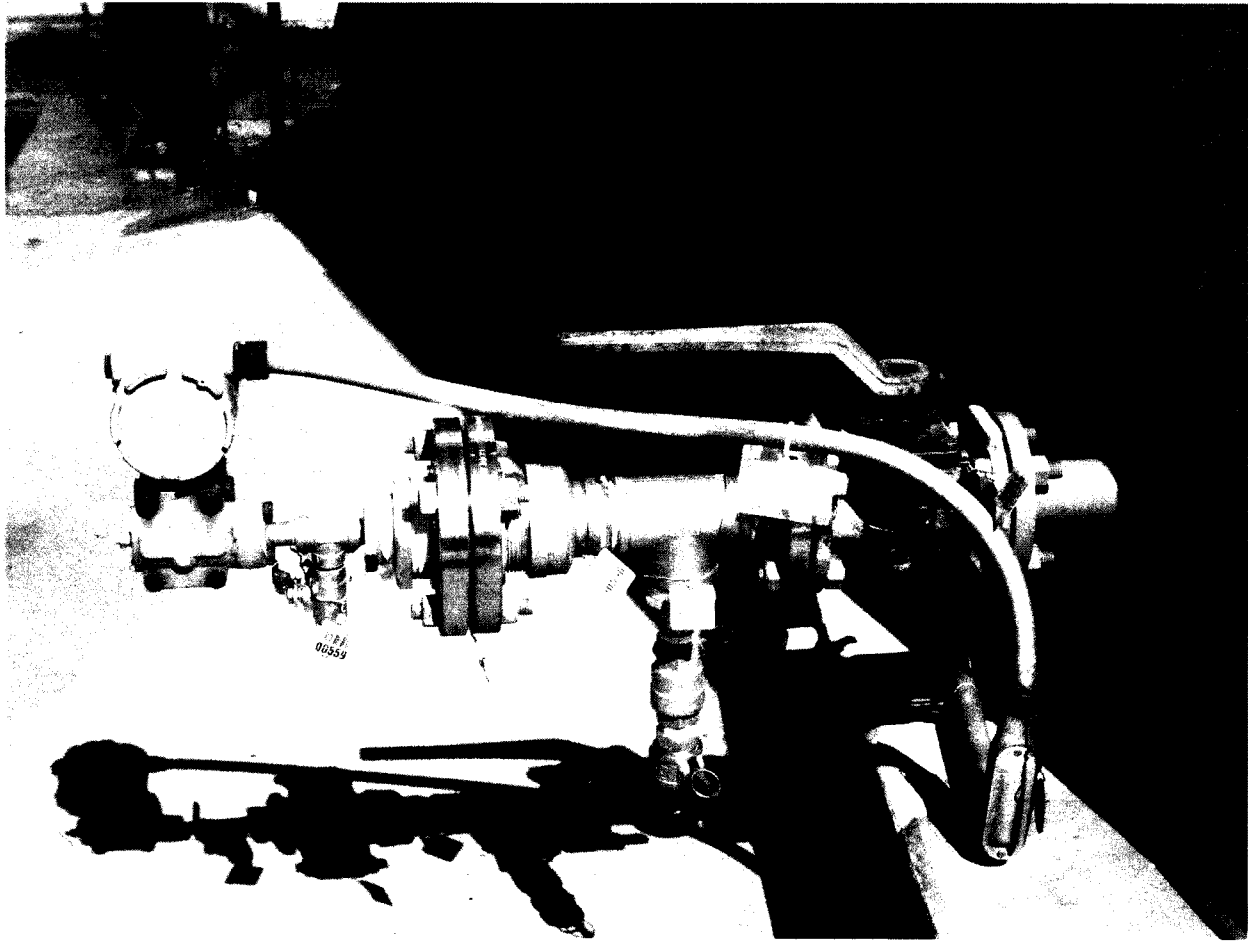


Photo #12 – Tagging for air emissions monitoring.

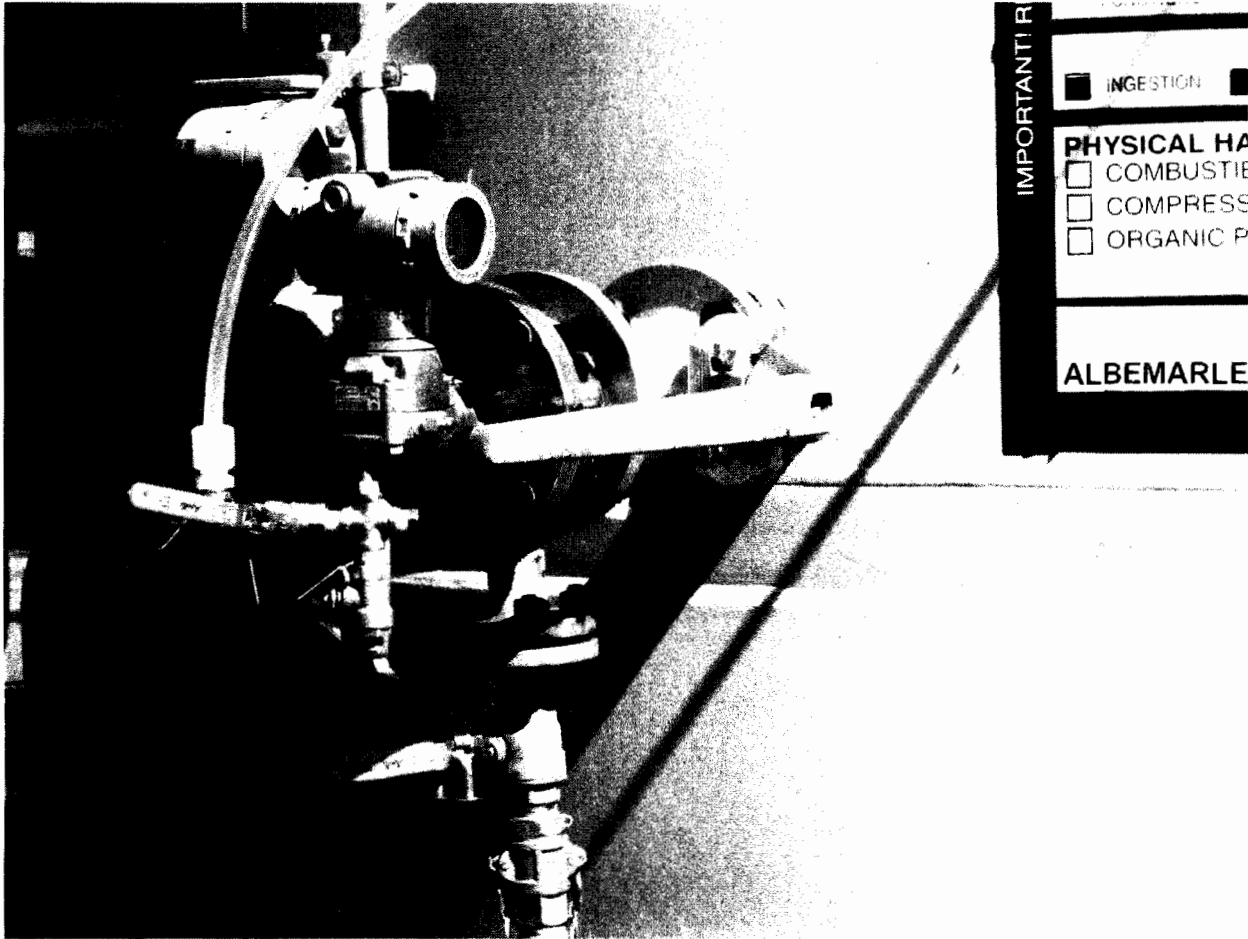


Photo #13 – Tagging for air emission monitoring.

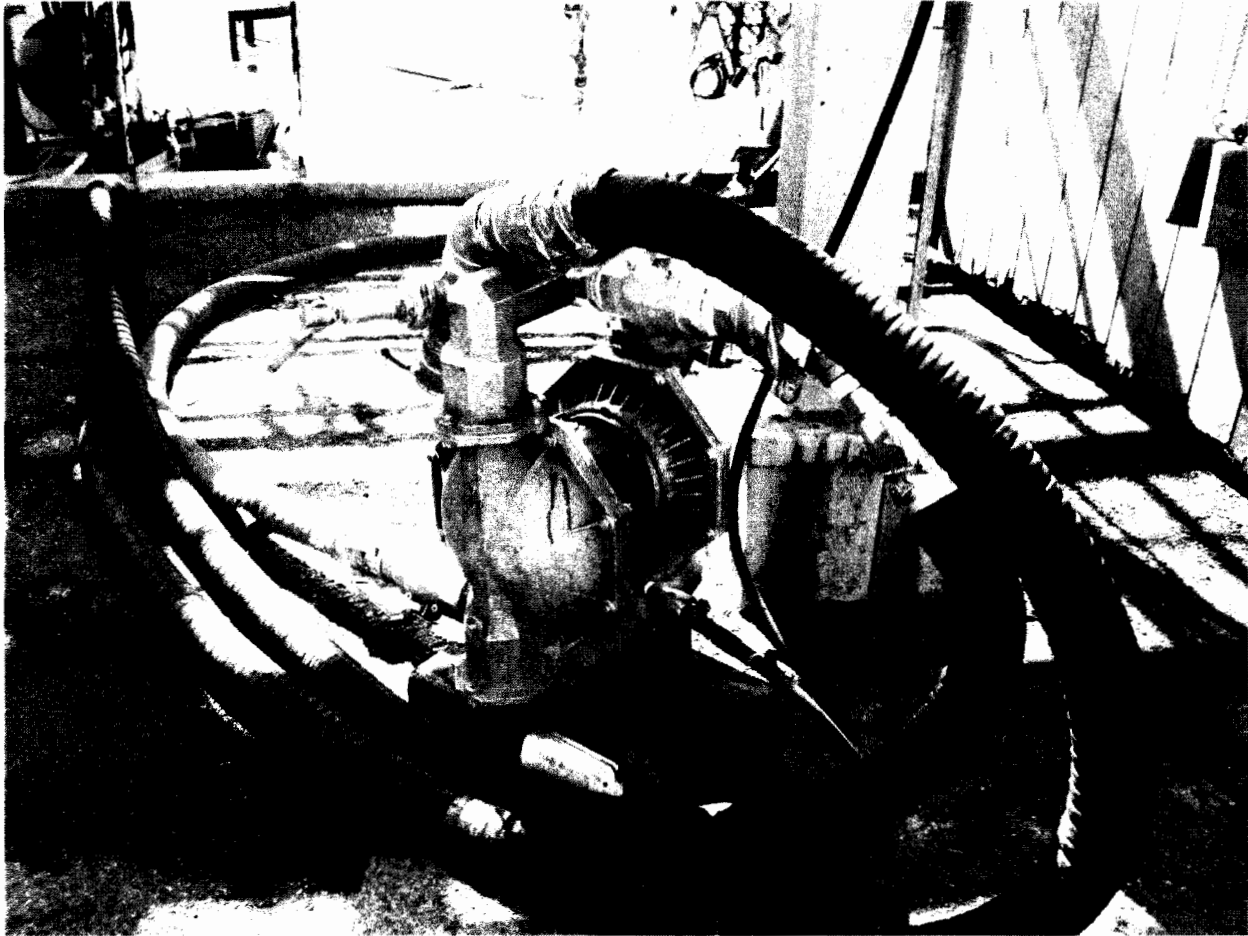


Photo #14 – Pump and valves at tank truck loading station missing tags.



Photo #15 – Drums for broken bulbs (Universal Waste dated 12/31/13) and aerosol cans (Hazardous Waste dated 7/24/13) in the maintenance shop.



Photo #16 – Box of spent bulbs in protective wooden container specifically designed for Universals Waste bulb. The cardboard box was folded closed when first observed.



Photo #17 – Label on side of wooden box in Photo #16.

Attachment A



Albemarle Corporation
2858 Back Vail Road
Tyrone, PA 16686-8100

Telephone: 814-684-4310
Facsimile: 814-684-7532

February 27, 2014

Pennsylvania Department of Environmental Protection
Attn: Robert Finkel
Bureau of Waste Management
400 Market St 14th Floor
Harrisburg Pa 17101-2301

Dear Mr. Finkel

Enclosed please find Albemarle Corporation's RCRA Subtitle C Site Identification Form. In addition a signed copy of the Declaration of Electronic Filing of the 2013 Annual Hazardous Waste Report. The GM forms were submitted online via the EasiTrak 2013 website.

If you have any questions or need more information, please call me at (814) 684-7240.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe R. Stanek", written in a cursive style.

Joseph R. Stanek
Environmental Engineer

Environmental (E17/WASTE-1 PA Hazardous)

**DECLARATION OF ELECTRONIC FILING OF
THE 2013 ANNUAL HAZARDOUS WASTE REPORT**

For the calendar year January 1, 2013, through December 31, 2013

EPA ID	<u>PAD030069140</u>		
Site/Company Name	<u>ALBEMARLE CORP</u>		
Site Address	<u>2858 BACK VAIL RD</u>		
City	<u>TYRONE</u>	State	<u>PA</u> Zip <u>16686</u>
Mailing Address	<u>2858 BACK VAIL RD</u>		
City	<u>TYRONE</u>	State	<u>PA</u> Zip <u>16686</u>
Contact Name	<u>JOSEPH R. STANEK</u>	Phone No	<u>8146847240</u> Ext <u></u>
Contact Title	<u>ENV ENGR</u>		

Part I - Declaration of Filer

I certify under penalty of law that the information shown on my 2013 Hazardous Waste Report, which I filed electronically, and that this document and all attachments were prepared under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted, is correct and current. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties under Section 3008 of the Resource Conservation and Recovery Act for submitting false information, including the possibility of fine and imprisonment for known violations.

Part II- Signature of Certification

Last Name	<u>FORDICK</u>	First Name	<u>JENNIFER</u>	Title	<u>SITE COMPLIANCE MANAGER</u>
Signature	<u><i>Jennifer L. Fordick</i></u>			Date	<u>02/27/2014</u>

Part III - Method of File Transmittal

☐ CD ☒ ARM Web Site

**** Note:** This is not the 2013 Annual Hazardous Waste Report. Only file this form if you submitted your 2013 Annual Hazardous Waste Report electronically. This form alone does not constitute submittal of the 2013 Hazardous Waste Report but is required for all methods of electronic submission of the report.

Submit Date: 02/27/2014